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November 30, 2016

Daniel P. Wolf  
Executive Secretary  
Minnesota Public Utilities Commission  
121 Seventh Place East, Suite 350  
St. Paul, MN 55101-2147

Re: Docket No. G004/M-16-557  
Additional Informational Update Filing on Great Plains' 2016 Demand Entitlement Filing

Dear Mr. Wolf:

Great Plains Natural Gas Co. (Great Plains), a Division of MDU Resources Group, Inc., submitted its Demand Entitlement Filing on June 30, 2016 (June 30 DEQ) in the above referenced docket. Great Plains filed an informational update to the June 30 DEQ on October 31, 2016.

Great Plains reports the following additional update:

**NORTH DISTRICT:**

No update to report.

**SOUTH DISTRICT:**

As stated in the informational update to the June 30 DEQ filed on October 31, 2016, Great Plains was working to release an additional 300 dk per day from December 1, 2016 - March 31, 2017 for a total capacity release of 1,300 dk per day. Great Plains now reports it has released an additional 300 dk per day of excess capacity at \$0.17 per dk for the upcoming heating season. Net of the total released capacity of 1,300 dk per day, the South District reserve margin for the 2016-2017 heating season is 6.0 percent, as shown on Exhibit B.

Updated Tables 4 and 5 as provided in the October 31 informational filing are provided below:

Updated Table 4  
South District Changes to Initial Filing

South District	Initial Filing (Dk)	Change (Dk) 1/	Update (Dk)
TF12 Base	4,604	817	5,421
TF12 Variable	2,931	(817)	2,114
Capacity Release	1,300	0	1,300

1/ Provided in the October 31, 2016 informational update.

Updated Table 5  
South District Updated Demand Costs

Interstate Pipelines	Volumes (1) Dk/day	Rates (2) \$	Months (3)	Demand Costs (4) \$
Viking				
FT-A - Zone 1-1 (Cat. 1)	5,000	4.7507	7	166,275
NNG				
TF12 Base - Summer	5,421	\$5.6830	7	215,653
TF12 Base - Winter	5,421	10.2300	5	277,284
TF12 Variable - Summer	2,114	5.6830	7	84,097
TF12 Variable - Winter	2,114	13.8660	5	146,564
TF5	3,410	15.1530	5	258,359
TFX - Summer	2,000	5.6830	7	79,562
TFX - Winter	7,200	15.1530	5	545,508
TFX Negotiated Contract	1,000	26.8918	5	134,459
TFX - Capacity Release	(1,000)	1/	5	(25,670)
TF12 - Capacity Release	(300)	2/	4	(6,171)
FDD-1 Reservation	4,640	1.7140	12	95,436
Total Demand Charges				<u>\$1,971,356</u>
1/ Contract terms are 1,000 dk/day at \$0.17/dk for the period November 1, 2016 through March 31, 2017.				
2/ Contract terms are 300 dk/day at \$0.17/dk for the period December 1, 2016 through March 31, 2017.				

The customer impact of the updated demand profile compared to rates effective May 1, 2016 is a decrease of \$0.0024 per dk as shown on Exhibit C. Please see Updated Table 6 below for

the annual rate impacts for the South District, as originally filed, the October 31 informational update and the changes noted above.

Updated Table 6  
South District Annual Demand Rate Impacts

Filing	Residential Customer (88.2 Dk)	Total Change Res (%)	Firm General Service (340.9 Dk)	Total Change FGS (%)
June 30, 2016	\$0.00	0.0	\$0.00	0.0
October 31, 2016	\$0.15	0.1	\$0.58	0.1
November 30, 2016	(\$0.21)	-0.2	(\$0.82)	-0.2

Great Plains filed an Application for Authority to Increase Natural Gas Rates in Minnesota, Docket No. G004/GR-15-879, in which the Company proposed to combine the two districts into one. As such, the updated reserve margin on a combined basis, for the 2016-2017 heating season is 5.7% as shown on Exhibit B.

Great Plains' analysis indicates that the portfolio in place for the 2016-2017 heating season will allow the Company to adequately serve customers.

In support of updating Docket No. G004/M-16-557, Great Plains has updated the following South District exhibits to show the impact of the changes listed above.

Exhibit A – Demand Profile  
Exhibit B – Design Day Capacity  
Exhibit C – Rate Impacts  
Exhibit D – Demand Entitlement Analysis

Per the Department's request in its Response Comments to Docket No. G004/M-15-645, dated August 31, 2016, Great Plains has included a red-line version of the updated Exhibits. Please see Exhibit E.

If you have any questions regarding this filing, please contact me at (701) 222-7856, or Brian M. Meloy, at (612) 335-1451.

Sincerely,

*/s/ Tamie A. Aberle*

Tamie A. Aberle  
Director of Regulatory Affairs

cc: Brian M. Meloy

**GREAT PLAINS NATURAL GAS CO.**  
**DEMAND ENTITLEMENT FILING 2016 - 2017 HEATING SEASON**  
**DEMAND PROFILE EFFECTIVE DECEMBER 1, 2016**  
**-UPDATE-**

Exhibit A  
Page 1 of 2

<u>Type of Capacity or Entitlement</u>	<u>Current Amount</u>	<u>Proposed Change</u>	<u>Proposed Amount</u>	<u>Contract Length</u>	<u>Expiration Date</u>
<b><u>Demand Profile for North District (dk) 1/</u></b>					
FT-A	8,000	0	8,000	5 years	10/31/17
FT-A - Zone 1-1 (November - March)	5,000	0	5,000	1 year	10/31/17
FT-A Seasonal (November - March)	2,000	0	2,000	1 year	10/31/17
FT-A (November - March)	0	1,400	1,400	5 months	3/31/17
FT-A Seasonal (November - March)	700	(700)	0	5 months	3/31/16
Subtotal	15,700	700	16,400		
TFX Seasonal (November - March)	2,000	0	2,000	5 years	10/31/19
TFX (Annual)	13,000	0	13,000	11.5 years	3/31/24
BP Seasonal Contract	730	(730)	0	5 months	3/31/16
Heating Season Total Capacity:	15,700	700	16,400		
Non-Heating Season Total Capacity:	8,000	0	8,000		
Forecasted Heating Season Design Day:	15,409	147	15,556		
Estimated Non-Heating Season Design Day:	8,741	60	8,801		
Heating Season Capacity: Surplus/(Shortage)	291	553	844		
Non-Heating Season Capacity: Surplus/(Shortage)	(741)	(60)	(801)		
<b><u>Demand Profile for South District (dk):</u></b>					
TF12 Base (Summer & Winter)	4,604	817	5,421	5 years	10/31/19
TF12 Variable (Summer & Winter)	2,931	(817)	2,114	5 years	10/31/19
TF5 (November - March)	3,410	0	3,410	5 years	10/31/19
TFX Negotiated (November - March)	1,000	0	1,000	10.5 years	3/31/25
TFX Seasonal (November - March)	5,200	0	5,200	5 years	10/31/19
TFX (Annual)	2,000	0	2,000	10 years	10/31/25
Proposed: TFX Seasonal - Capacity Release	0	(1,000)	(1,000)	5 months	3/31/17
Proposed: TF12 - Capacity Release	0	(300)	(300)	4 months	3/31/17
TFX Seasonal - Capacity Release	(1,300)	1,300	0	5 months	3/31/16
Subtotal	17,845	0	17,845		
FT-A - Zone 1-1 (April - October)	5,000	0	5,000	1 year	10/31/17
FDD-1 Reservation	4,640	0	4,640	5 years	5/31/20
Heating Season Total Capacity:	17,845	0	17,845		
Non-Heating Season Total Capacity:	14,535	0	14,535		
Forecasted Heating Season Design Day:	16,858	(16)	16,842		
Estimated Non-Heating Season Design Day:	9,036	(6)	9,030		
Heating Season Capacity: Surplus/(Shortage)	987	16	1,003		
Non-Heating Season Capacity: Surplus/(Shortage)	5,499	6	5,505		

1/ Minnesota North District communities plus Wahpeton, ND.

**GREAT PLAINS NATURAL GAS CO.  
DEMAND PROFILE  
SOUTH DISTRICT  
-UPDATE-**

2014-2015 Heating Season G004/M-14-563		2015-2016 Heating Season G004/M-15-645		2016-2017 Heating Season G004/M-16-557		Difference
	Quantity (dk)		Quantity (dk)		Quantity (dk)	
TF-12 Base	5,100	TF-12 Base	4,604	TF-12 Base	5,421	817
TF-12 Variable	2,435	TF-12 Variable	2,931	TF-12 Variable	2,114	(817)
FT-A (April through October)	5,000	FT-A (April through October)	5,000	FT-A (April through October)	5,000	0
TF-5 (November through March)	3,410	TF-5 (November through March)	3,410	TF-5 (November through March)	3,410	0
TFX (November through March)	6,200	TFX (November through March)	6,200	TFX (November through March)	6,200	0
		TFX (Annual)	2,000	TFX (Annual)	2,000	0
		TFX - Capacity Release	(1,300)	TFX - Capacity Release	(1,000)	300
				TF-12 - Capacity Release	(300)	(300)
FDD-1 Reservation	4,640	FDD-1 Reservation	4,640	FDD-1 Reservation	4,640	0
Heating Season Total Capacity	17,145	Heating Season Total Capacity	17,845	Heating Season Total Capacity	17,845	0
Non-Heating Season Total Capacity	12,535	Non-Heating Season Total Capacity	14,535	Non-Heating Season Total Capacity	14,535	0
Total Entitlement (Including Peak Shaving)	17,145	Total Entitlement	17,845	Total Entitlement	17,845	0
Total Annual Transportation	7,535	Total Annual Transportation	9,535	Total Annual Transportation	9,535	0
Total Season Transportation	9,610	Total Season Transportation	10,310	Total Season Transportation	10,310	0
Percent TF-5	31.16%	Percent TF-5	31.16%	Percent TF-5	31.16%	0.00%
Total Percent Seasonal	56.05%	Total Percent Seasonal	57.78%	Total Percent Seasonal	57.78%	0.00%

**GREAT PLAINS NATURAL GAS CO.  
DEMAND ENTITLEMENT FILING 2016 - 2017 HEATING SEASON  
DESIGN DAY - DECEMBER 2016  
-UPDATE-**

Area	Customer Factors 1/			Design HDD 2/	No. of Customers 3/	Projected Customers 4/	Peak/ Customer	Projected Peak	L&UA 5/	Projected	Capacity	Reserve
	Dk/day	Dk/DD	RSqr					Day (dk)		Design		
Crookston	0.03961	0.01374	0.97169	96	2,501	2,530	1.35865	3,438	24	3,462		
North 4	0.05577	0.01330	0.96137	91	7,075	7,127	1.26607	9,020	63	9,083		
Wahpeton	0.07470	0.01413	0.98257	91	2,170	2,197	1.36053	2,990	21	3,011		
Total North District					11,746	11,854		15,448	108	15,556	16,400	5.4%
South 13	0.05233	0.01622	0.97828	83	11,884	11,959	1.39859	16,725	117	16,842	17,845	6.0%
Total					23,630	23,813		32,173	225	32,398	34,245	5.7%

1/ Use per customer factors based on regression analysis for the 36 months ending March 2016.

2/ Design Heating Degree Days Base 60 degrees F.

3/ Reflects monthly average for December 2015 - February 2016.

4/ Customer growth is based on regression analysis for the 36 months ending March 2016 with composite growth rates of: Crookston = 1.30%, North = 0.85%, Wahpeton = 1.21%, South = 0.70%.

5/ Lost and Unaccounted for Gas percentage of 0.7%.

**GREAT PLAINS NATURAL GAS CO.  
RATE EFFECT OF PROPOSED DEMAND - DECEMBER 1, 2016  
SOUTH DISTRICT  
-UPDATE-**

	Last Rate Case 1/	Last Demand Change 2/	May 2016 PGA 4/	December 2016 PGA	% Change from		May 2016 Rates	Change from May 2016 Rates
	Last Rate Case	Last Demand Change			Last Rate Case	Last Demand Change		
<b>Residential</b>								
Commodity Cost of Gas	\$3.2123	\$2.5794	\$2.0658	\$3.1489	-2.0%	22.1%	52.4%	\$1.0831
Demand Cost of Gas	1.2379	1.3854	1.2324	1.2300	-0.6%	-11.2%	-0.2%	(0.0024)
Commodity Margin 3/	1.3367	1.3367	1.3367	1.3367	0.0%	0.0%	0.0%	0.0000
Total Rate	5.7869	5.3015	4.6349	5.7156	-1.2%	7.8%	23.3%	1.0807
Average Annual Usage (dk)	88.2	88.2	88.2	88.2				
Average Annual Cost of Gas	\$510.40	\$467.59	\$408.80	\$504.12	-1.2%	7.8%	23.3%	\$95.32
<b>Firm General Service</b>								
Commodity Cost of Gas	\$3.2123	\$2.5794	\$2.0658	\$3.1489	-2.0%	22.1%	52.4%	\$1.0831
Demand Cost of Gas	1.2379	1.3854	1.2324	1.2300	-0.6%	-11.2%	-0.2%	(0.0024)
Commodity Margin 3/	1.0889	1.0889	1.0889	1.0889	0.0%	0.0%	0.0%	0.0000
Total Rate	5.5391	5.0537	4.3871	5.4678	-1.3%	8.2%	24.6%	1.0807
Average Annual Usage (dk)	340.9	340.9	340.9	340.9				
Average Annual Cost of Gas	\$1,888.28	\$1,722.81	\$1,495.56	\$1,863.97	-1.3%	8.2%	24.6%	\$368.41
<b>Customer Class</b>								
	Commodity Change		Demand Change		Total Change		Average Annual Bill Change	
	(\$/dk)	(Percent)	(\$/dk)	(Percent)	(\$/dk)	(Percent)		
Residential	\$1.0831	52.4%	(\$0.0024)	-0.2%	\$1.0807	23.3%	\$95.32	
Firm General Service	1.0831	52.4%	(0.0024)	-0.2%	1.0807	24.6%	\$368.41	

1/ Base Cost of Gas Effective January 1, 2016 in Docket No. G004/MR-15-878 or Docket No. G004/MR-16-834.

2/ Demand in Docket No. G004/AA-15-1011, effective December 1, 2015.

3/ Includes CCRA and GAP. CCRC change of \$0.304 and CCRA change of (\$0.0304) effective January 1, 2016 - Docket No. G004/GR-15-879.

4/ Great Plains did not file a South District PGA for June 2016.

**GREAT PLAINS NATURAL GAS CO.  
DEMAND ENTITLEMENT ANALYSIS  
SOUTH DISTRICT**

**-UPDATE-**

Heating Season	Number of Firm Customers			Design Day Requirement			Total Entitlement + Storage + Peak Shaving			
	(1) Number of Customers	(2) Change From Previous Year	(3) % Change From Previous Year	(4) Design Day (dk)	(5) Change From Previous Year	(6) % Change From Previous Year	(7) Total Entitlement (dk)	(8) Change From Previous Year	(9) % Change From Previous Year	(10) % of Reserve Margin [(7)-(4)]/(4)
2016-2017	11,959	(80)	-0.66%	16,842	(16)	-0.09%	17,845	0	0.00%	5.96%
2015-2016	12,039	197	1.66%	16,858	546	3.35%	17,845	700	4.08%	5.85%
2014-2015	11,842	193	1.66%	16,312	1,019	6.66%	17,145	1,500	9.59%	5.11%
2013-2014	11,649	118	1.02%	15,293	443	2.98%	15,645	0	0.00%	2.30%
2012-2013	11,531	(13)	-0.11%	14,850	(18)	-0.12%	15,645	0	0.00%	5.35%
2011-2012	11,544	(8)	-0.07%	14,868	(297)	-1.96%	15,645	(380)	-2.37%	5.23%
2010-2011	11,552	10	0.09%	15,165	(267)	-1.73%	16,025	(1,170)	-6.80%	5.67%
2009-2010	11,542	77	0.67%	15,432	156	1.02%	17,195	(170)	-0.98%	11.42%
2008-2009	11,465	8	0.07%	15,276	(301)	-1.93%	17,365	0	0.00%	13.68%
2007-2008	11,457	(27)	-0.24%	15,577	(117)	-0.75%	17,365	0	0.00%	11.48%
2006-2007	11,484	(224)	-1.91%	15,694	(699)	-4.26%	17,365	0	0.00%	10.65%
2005-2006	11,708	(92)	-0.78%	16,393	(336)	-2.01%	17,365	0	0.00%	5.93%
2004-2005	11,800	60	0.51%	16,729	92	0.55%	17,365	0	0.00%	3.80%
2003-2004	11,740	40	0.34%	16,637	(413)	-2.42%	17,365	0	0.00%	4.38%
2002-2003	11,700	76	0.65%	17,050	(2,058)	-10.77%	17,365	(2,600)	-13.02%	1.85%
2001-2002	11,624	189	1.65%	19,108	7	0.04%	19,965	0	0.00%	4.49%
2000-2001	11,435	(41)	-0.36%	19,101	0	0.00%	19,965	0	0.00%	4.52%
1999-2000	11,476	280	2.50%	19,101	340	1.81%	19,965	0	0.00%	4.52%
1998-1999	11,196	(25)	-0.22%	18,761	374	2.03%	19,965	0	0.00%	6.42%
1997-1998	11,221	306	2.80%	18,387	431	2.40%	19,965	2,000	11.13%	8.58%
1996-1997	10,915	235	2.20%	17,956	353	2.01%	17,965	1,008	5.94%	0.05%
1995-1996	10,680			17,603			16,957			-3.67%
Annual Average			0.55%			-0.15%			0.36%	5.62%

Heating Season	Firm Peak Day Sendout			(14)	(15)	(16)	(17)
	(11) Firm Peak Day Sendout (dk)	(12) Change From Previous Year	(13) % Change From Previous Year	Excess Per Customer [(7)-(4)]/(1)	Design Day per Customer (4)/(1)	Entitlement per Customer (7)/(1)	Peak Day Sendout per Customer (11)/(1)
2016-2017				0.0839	1.4083	1.4922	
2015-2016	15,582	351	2.30%	0.0820	1.4003	1.4823	1.2943
2014-2015	15,231	774	5.35%	0.0703	1.3775	1.4478	1.2862
2013-2014	14,457	1,941	15.51%	0.0302	1.3128	1.3430	1.2411
2012-2013	12,516	2,248	21.89%	0.0689	1.2878	1.3568	1.0854
2011-2012	10,268	(1,652)	-13.86%	0.0673	1.2879	1.3552	0.8895
2010-2011	11,920	(692)	-5.49%	0.0744	1.3128	1.3872	1.0319
2009-2010	12,612	(962)	-7.09%	0.1527	1.3370	1.4898	1.0927
2008-2009	13,574	888	7.00%	0.1822	1.3324	1.5146	1.1840
2007-2008	12,686	401	3.26%	0.1561	1.3596	1.5157	1.1073
2006-2007	12,285	(789)	-6.03%	0.1455	1.3666	1.5121	1.0697
2005-2006	13,074	(996)	-7.08%	0.0830	1.4002	1.4832	1.1167
2004-2005	14,070	(626)	-4.26%	0.0539	1.4177	1.4716	1.1924
2003-2004	14,696	425	2.98%	0.0620	1.4171	1.4791	1.2518
2002-2003	14,271	2,151	17.75%	0.0269	1.4573	1.4842	1.2197
2001-2002	12,120	(2,724)	-18.35%	0.0737	1.6438	1.7176	1.0427
2000-2001	14,844	(1,921)	-11.46%	0.0756	1.6704	1.7460	1.2981
1999-2000	16,765	828	5.20%	0.0753	1.6644	1.7397	1.4609
1998-1999	15,937	(133)	-0.83%	0.1075	1.6757	1.7832	1.4235
1997-1998	16,070	115	0.72%	0.1406	1.6386	1.7793	1.4321
1996-1997	15,955	(418)	-2.55%	0.0008	1.6451	1.6459	1.4617
1995-1996	16,373			(0.0605)	1.6482	1.5877	1.5331
Annual Average			0.25%	0.0797	1.4573	1.5370	1.2245



**GREAT PLAINS NATURAL GAS CO.**  
**DEMAND ENTITLEMENT FILING 2016 - 2017 HEATING SEASON**  
**DEMAND PROFILE EFFECTIVE DECEMBER 1, 2016**  
**-UPDATE-**

Exhibit E  
Page 1 of 5

<u>Type of Capacity or Entitlement</u>	<u>Current Amount</u>	<u>Proposed Change</u>	<u>Proposed Amount</u>	<u>Contract Length</u>	<u>Expiration Date</u>
<b><u>Demand Profile for North District (dk) 1/</u></b>					
FT-A	8,000	0	8,000	5 years	10/31/17
FT-A - Zone 1-1 (November - March)	5,000	0	5,000	1 year	10/31/17
FT-A Seasonal (November - March)	2,000	0	2,000	1 year	10/31/17
FT-A (November - March)	0	<del>1,350</del> 1,400	<del>1,350</del> 1,400	5 months	3/31/17
FT-A Seasonal (November - March)	700	(700)	0	5 months	3/31/16
Subtotal	15,700	<del>650</del> 700	<del>16,350</del> 16,400		
TFX Seasonal (November - March)	2,000	0	2,000	5 years	10/31/19
TFX (Annual)	13,000	0	13,000	11.5 years	3/31/24
BP Seasonal Contract	730	(730)	0	5 months	3/31/16
Heating Season Total Capacity:	15,700	<del>650</del> 700	<del>16,350</del> 16,400		
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Forecasted Heating Season Design Day:	15,409	147	15,556		
Estimated Non-Heating Season Design Day:	8,741	60	8,801		
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TFX (Annual)	2,000	0	2,000	10 years	10/31/25
Proposed: TFX Seasonal - Capacity Release	0	<del>(1,300)</del> (1,000)	<del>(1,300)</del> (1,000)	5 months	3/31/17
<u>Proposed TF12 - Capacity Release</u>	<u>0</u>	<u>(300)</u>	<u>(300)</u>	<u>4 months</u>	<u>3/31/17</u>
TFX Seasonal - Capacity Release	(1,300)	1,300	0	5 months	3/31/16
Subtotal	17,845	0	17,845		
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1/ Minnesota North District communities plus Wahpeton, ND.

**GREAT PLAINS NATURAL GAS CO.  
DEMAND PROFILE  
SOUTH DISTRICT  
-UPDATE-**

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	Quantity (dk)		Quantity (dk)		Quantity (dk)	
TF-12 Base	5,100	TF-12 Base	4,604	TF-12 Base	4,604 5,421	0 817
TF-12 Variable	2,435	TF-12 Variable	2,931	TF-12 Variable	2,931 2,114	0 (817)
FT-A (April through October)	5,000	FT-A (April through October)	5,000	FT-A (April through October)	5,000	0
TF-5 (November through March)	3,410	TF-5 (November through March)	3,410	TF-5 (November through March)	3,410	0
TFX (November through March)	6,200	TFX (November through March)	6,200	TFX (November through March)	6,200	0
		TFX (Annual)	2,000	TFX (Annual)	2,000	0
		TFX - Capacity Release	(1,300)	TFX - Capacity Release	(1,300) (1,000)	0 300
				TF-12 - Capacity Release	0 (300)	0 (300)
FDD-1 Reservation	4,640	FDD-1 Reservation	4,640	FDD-1 Reservation	4,640	0
Heating Season Total Capacity	17,145	Heating Season Total Capacity	17,845	Heating Season Total Capacity	17,845	0
Non-Heating Season Total Capacity	12,535	Non-Heating Season Total Capacity	14,535	Non-Heating Season Total Capacity	14,535	0
Total Entitlement (Including Peak Shaving)	17,145	Total Entitlement	17,845	Total Entitlement	17,845	0
Total Annual Transportation	7,535	Total Annual Transportation	9,535	Total Annual Transportation	9,535	0
Total Season Transportation	9,610	Total Season Transportation	10,310	Total Season Transportation	10,310	0
Percent TF-5	31.16%	Percent TF-5	31.16%	Percent TF-5	31.16%	0.00%
Total Percent Seasonal	56.05%	Total Percent Seasonal	57.78%	Total Percent Seasonal	57.78%	0.00%

**GREAT PLAINS NATURAL GAS CO.  
DEMAND ENTITLEMENT FILING 2016 - 2017 HEATING SEASON  
DESIGN DAY - DECEMBER 2016  
-UPDATE-**

Area	Customer Factors 1/			Design HDD 2/	No. of Customers 3/	Projected Customers 4/	Peak/ Customer	Projected Peak Day (dk)	L&UA 5/	Projected Design	Capacity	Reserve	
	Dk/day	Dk/DD	RSqr										
Crookston	0.03961	0.01374	0.97169	96	2,501	2,530	1.35865	3,438	24	3,462			
North 4	0.05577	0.01330	0.96137	91	7,075	7,127	1.26607	9,020	63	9,083			
Wahpeton	0.07470	0.01413	0.98257	91	2,170	2,197	1.36053	2,990	21	3,011			
Total North District					11,746	11,854		15,448	108	15,556	16,350	16,400	5.1% 5.4%
South 13	0.05233	0.01622	0.97828	83	11,884	11,959	1.39859	16,725	117	16,842	17,845		6.0%
Total					23,630	23,813		32,173	225	32,398	34,195	34,245	5.5% 5.7%

1/ Use per customer factors based on regression analysis for the 36 months ending March 2016.

2/ Design Heating Degree Days Base 60 degrees F.

3/ Reflects monthly average for December 2015 - February 2016.

4/ Customer growth is based on regression analysis for the 36 months ending March 2016 with composite growth rates of: Crookston = 1.30%, North = 0.85%, Wahpeton = 1.21%, South = 0.70%.

5/ Lost and Unaccounted for Gas percentage of 0.7%.

**GREAT PLAINS NATURAL GAS CO.**  
**RATE EFFECT OF PROPOSED DEMAND - DECEMBER 1, 2016**  
**SOUTH DISTRICT**  
**-UPDATE-**

	Last Rate Case 1/	Last Demand Change 2/	May 2016 PGA 4/	December 2016 PGA	% Change from				Change from May 2016 Rates
					Last Rate Case	Last Demand Change	May 2016 Rates		
<b>Residential</b>									
Commodity Cost of Gas	\$3.2123	\$2.5794	\$2.0658	<del>\$2.0658</del> \$3.1489	<del>-35.7%</del> -2.0%	<del>-19.9%</del> 22.1%	0.00%	52.4%	\$0.0000 \$1.0831
Demand Cost of Gas	1.2379	1.3854	1.2324	<del>1.2324</del> 1.2300	<del>-0.4%</del> -0.6%	<del>-11.0%</del> -11.2%	0.00%	-0.2%	0.0000 (0.0024)
Commodity Margin 3/	1.3367	1.3367	1.3367	1.3367	0.0%	0.0%	0.0%	0.0%	0.0000
Total Rate	5.7869	5.3015	4.6349	<del>4.6349</del> 5.7156	<del>-19.9%</del> -1.2%	<del>-12.6%</del> 7.8%	0.00%	23.3%	0.0000 1.0807
Average Annual Usage (dk)	88.2	88.2	88.2	88.2					
Average Annual Cost of Gas	\$510.40	\$467.59	\$408.80	<del>\$408.80</del> \$504.12	<del>-19.9%</del> -1.2%	<del>-12.6%</del> 7.8%	0.00%	23.3%	\$0.00 \$95.32
<b>Firm General Service</b>									
Commodity Cost of Gas	\$3.2123	\$2.5794	\$2.0658	<del>\$2.0658</del> \$3.1489	<del>-35.7%</del> -2.0%	<del>-19.9%</del> 22.1%	0.00%	52.4%	\$0.0000 \$1.0831
Demand Cost of Gas	1.2379	1.3854	1.2324	<del>1.2324</del> 1.2300	<del>-0.4%</del> -0.6%	<del>-11.0%</del> -11.2%	0.00%	-0.2%	0.0000 (0.0024)
Commodity Margin 3/	1.0889	1.0889	1.0889	1.0889	0.0%	0.0%	0.0%	0.0%	0.0000
Total Rate	5.5391	5.0537	4.3871	<del>4.3871</del> 5.4678	<del>-20.8%</del> -1.3%	<del>-13.2%</del> 8.2%	0.00%	24.6%	0.0000 1.0807
Average Annual Usage (dk)	340.9	340.9	340.9	340.9					
Average Annual Cost of Gas	\$1,888.28	\$1,722.81	\$1,495.56	<del>\$1,495.56</del> \$1,863.97	<del>-20.8%</del> -1.3%	<del>-13.2%</del> 8.2%	0.00%	24.6%	\$0.00 \$368.41
		Commodity Change		Demand Change		Total Change		Average Annual Bill Change	
<b>Customer Class</b>		(\$/dk)	(Percent)	(\$/dk)	(Percent)	(\$/dk)	(Percent)		
Residential		\$0.0000 \$1.0831	0.0% 52.4%	\$0.0000 (\$0.0024)	0.0% -0.2%	\$0.0000 \$1.0807	0.0% 23.3%	\$0.00 \$95.32	
Firm General Service		0.0000 1.0831	0.0% 52.4%	0.0000 (0.0024)	0.0% -0.2%	0.0000 1.0807	0.0% 24.6%	0.00 368.41	

1/ Base Cost of Gas Effective January 1, 2016 in Docket No. G004/MR-15-878 or Docket No. G004/MR-16-834.

2/ Demand in Docket No. G004/AA-15-1011, effective December 1, 2015.

3/ Includes CCRA and GAP. CCRC change of \$0.304 and CCRA change of (\$0.0304) effective January 1, 2016 - Docket No. G004/GR-15-879.

4/ Great Plains did not file a South District PGA for June 2016.

**GREAT PLAINS NATURAL GAS CO.  
DEMAND ENTITLEMENT ANALYSIS  
SOUTH DISTRICT  
-UPDATE-**

Heating Season	Number of Firm Customers			Design Day Requirement			Total Entitlement + Storage + Peak Shaving			
	(1) Number of Customers	(2) Change From Previous Year	(3) % Change From Previous Year	(4) Design Day (dk)	(5) Change From Previous Year	(6) % Change From Previous Year	(7) Total Entitlement (dk)	(8) Change From Previous Year	(9) % Change From Previous Year	(10) % of Reserve Margin [(7)-(4)]/(4)
2016-2017	11,959	(80)	-0.66%	16,842	(16)	-0.09%	17,845	0	0.00%	5.96%
2015-2016	12,039	197	1.66%	16,858	546	3.35%	17,845	700	4.08%	5.85%
2014-2015	11,842	193	1.66%	16,312	1,019	6.66%	17,145	1,500	9.59%	5.11%
2013-2014	11,649	118	1.02%	15,293	443	2.98%	15,645	0	0.00%	2.30%
2012-2013	11,531	(13)	-0.11%	14,850	(18)	-0.12%	15,645	0	0.00%	5.35%
2011-2012	11,544	(8)	-0.07%	14,868	(297)	-1.96%	15,645	(380)	-2.37%	5.23%
2010-2011	11,552	10	0.09%	15,165	(267)	-1.73%	16,025	(1,170)	-6.80%	5.67%
2009-2010	11,542	77	0.67%	15,432	156	1.02%	17,195	(170)	-0.98%	11.42%
2008-2009	11,465	8	0.07%	15,276	(301)	-1.93%	17,365	0	0.00%	13.68%
2007-2008	11,457	(27)	-0.24%	15,577	(117)	-0.75%	17,365	0	0.00%	11.48%
2006-2007	11,484	(224)	-1.91%	15,694	(699)	-4.26%	17,365	0	0.00%	10.65%
2005-2006	11,708	(92)	-0.78%	16,393	(336)	-2.01%	17,365	0	0.00%	5.93%
2004-2005	11,800	60	0.51%	16,729	92	0.55%	17,365	0	0.00%	3.80%
2003-2004	11,740	40	0.34%	16,637	(413)	-2.42%	17,365	0	0.00%	4.38%
2002-2003	11,700	76	0.65%	17,050	(2,058)	-10.77%	17,365	(2,600)	-13.02%	1.85%
2001-2002	11,624	189	1.65%	19,108	7	0.04%	19,965	0	0.00%	4.49%
2000-2001	11,435	(41)	-0.36%	19,101	0	0.00%	19,965	0	0.00%	4.52%
1999-2000	11,476	280	2.50%	19,101	340	1.81%	19,965	0	0.00%	4.52%
1998-1999	11,196	(25)	-0.22%	18,761	374	2.03%	19,965	0	0.00%	6.42%
1997-1998	11,221	306	2.80%	18,387	431	2.40%	19,965	2,000	11.13%	8.58%
1996-1997	10,915	235	2.20%	17,956	353	2.01%	17,965	1,008	5.94%	0.05%
1995-1996	10,680			17,603			16,957			-3.67%
Annual Average			0.55%			-0.15%			0.36%	5.62%

Heating Season	Firm Peak Day Sendout			(14) Excess Per Customer [(7)-(4)]/(1)	(15) Design Day per Customer (4)/(1)	(16) Entitlement per Customer (7)/(1)	(17) Peak Day Sendout per Customer (11)/(1)
	(11) Firm Peak Day Sendout (dk)	(12) Change From Previous Year	(13) % Change From Previous Year				
2016-2017				0.0839	1.4083	1.4922	
2015-2016	15,582	351	2.30%	0.0820	1.4003	1.4823	1.2943
2014-2015	15,231	774	5.35%	0.0703	1.3775	1.4478	1.2862
2013-2014	14,457	1,941	15.51%	0.0302	1.3128	1.3430	1.2411
2012-2013	12,516	2,248	21.89%	0.0689	1.2878	1.3568	1.0854
2011-2012	10,268	(1,652)	-13.86%	0.0673	1.2879	1.3552	0.8895
2010-2011	11,920	(692)	-5.49%	0.0744	1.3128	1.3872	1.0319
2009-2010	12,612	(962)	-7.09%	0.1527	1.3370	1.4898	1.0927
2008-2009	13,574	888	7.00%	0.1822	1.3324	1.5146	1.1840
2007-2008	12,686	401	3.26%	0.1561	1.3596	1.5157	1.1073
2006-2007	12,285	(789)	-6.03%	0.1455	1.3666	1.5121	1.0697
2005-2006	13,074	(996)	-7.08%	0.0830	1.4002	1.4832	1.1167
2004-2005	14,070	(626)	-4.26%	0.0539	1.4177	1.4716	1.1924
2003-2004	14,696	425	2.98%	0.0620	1.4171	1.4791	1.2518
2002-2003	14,271	2,151	17.75%	0.0269	1.4573	1.4842	1.2197
2001-2002	12,120	(2,724)	-18.35%	0.0737	1.6438	1.7176	1.0427
2000-2001	14,844	(1,921)	-11.46%	0.0756	1.6704	1.7460	1.2981
1999-2000	16,765	828	5.20%	0.0753	1.6644	1.7397	1.4609
1998-1999	15,937	(133)	-0.83%	0.1075	1.6757	1.7832	1.4235
1997-1998	16,070	115	0.72%	0.1406	1.6386	1.7793	1.4321
1996-1997	15,955	(418)	-2.55%	0.0008	1.6451	1.6459	1.4617
1995-1996	16,373			(0.0605)	1.6482	1.5877	1.5331
Annual Average			0.25%	0.0797	1.4573	1.5370	1.2245